



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,485	02/21/2002	Carl D. McCrosky	034456148	8468
7590	06/16/2006			EXAMINER PHILPOTT, JUSTIN M
Robert E. Krebs THELEN REID & PRIEST P.O. Box 640640 SAN JOSE, CA 95164-0640			ART UNIT 2616	PAPER NUMBER

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/080,485	MCCROSKEY ET AL.	
	Examiner Justin M. Philpott	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 April 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 April 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed April 21, 2006 have been fully considered but they are not persuasive.

Specifically, applicant argues (pages 9-11) that the prior art does not teach the newly added limitations of "partially compliant" SONET/SDH signal streams recited in the amended claims, and that applicant's claims should therefore be allowed.

In response to this argument, first, the prior art does in fact teach these new claim limitations as discussed in detail in the following office action with respect to the newly cited art of Benson et al. Second, as discussed further in the following action, the above-mentioned added limitations of "partially compliant" SONET/SDH signal streams are not enabled by applicant's specification, and therefore, further argument that the prior art does not teach the limitations is moot. Third, these limitations are preceded by the language "operative to", and according to MPEP 2111.04, "Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure". Because the phrase "operative to" does not require steps to be performed and/or does not limit the claim to a particular structure, claim scope is not limited and the recited elements of the receive and transmit modules are not given patentable weight. Accordingly, for the above three reasons, applicant's argument that the claims should be allowed is not persuasive.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

3. Newly submitted claims 11-19 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: new independent claim 11 (and by dependence, claims 12-19) recites “(a) a receive module operative to receive incoming *partially compliant* SONET/SDH signal streams” (emphasis added) which is an operation distinct from that recited in original independent claim 1. Further, new independent claim 11 (and by dependence, claims 12-19) recites recovering byte alignment by “*one of* using SONET/SDH A1/A2 frame delineation to find both byte and frame boundaries *and* using 8B/10B coding to find byte boundaries and 8B/10B control characters to find frame boundaries” (emphasis added) which is an operation distinct from the frame alignment and byte recovery operation recited in independent claim 1. Further, new independent claim 11 (and by dependence, claims 12-19) recites a receive module which “comprises multiple receivers and [an] interface device [that] is operative to find mutual frame alignment of partially compliant SONET/SDH frames on the receivers” which is an additional operation distinct from the operations recited in independent claim 1. Still further, new independent claim 11 (and by dependence, claims 12-19) recites a scrambling operation to scramble to “*one of* 8B/10B encode and scramble STS-12” (emphasis added) which is distinct from the scrambling operation recited in independent claim 1. For the reasons set forth above, new independent claim 11 (and by

dependence, claims 12-19) comprises operations distinct from that of independent claim 1, yielding an invention that is independent or distinct from the invention originally claimed (i.e., in claims 1-10).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-19 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, claims 1 and 6 recite “partially compliant SONET/SDH signal streams” which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, while enabling for “SONET/SDH signal streams”, the specification is absent of any recitation of “partially compliant” or any language or drawings, either explicit or implicit, which could indicate SONET/SDH signal streams that are “partially compliant”. If applicant maintains

the position that applicant's originally filed specification enables the above-mentioned claim language, applicant is respectfully requested to respond to this office action with page and line numbers and/or elements of figures which indicate "partially compliant SONET/SDH signal streams" as presently recited in applicant's claims.

6. Claims 2-10 depend upon claim 1 and are rejected for the same reason discussed above regarding claim 1.

Claim Objections

7. Claims 1, 4-7 and 9 are objected to because of the following informalities: it appears that "8B/10B encode STS-12" (claim 1, line 9) should be changed to "8B/10B encoded STS-12", and "and by using" (claim 1, lines 4-5) should be changed to "and using" in order to correct grammatical/typographical errors. Additionally, according to MPEP 2111.04, since the phrase "operative to" (claim 1, lines 3 and 8) does not require steps to be performed and/or does not limit the claim to a particular structure, claim scope is not limited. Accordingly, it would appear that the following changes should be made in order for claim scope to be limited so as to give patentable weight to the recited elements of receive and transmit modules: "operative to receive" (claim 1, line 3) should be changed to "receiving"; "to recover" (claim 1, line 4) should be changed to "recovering"; "operative to scramble" (claim 1, line 8) should be changed to "scrambling"; "to serialize" (claim 1, line 9) should be changed to "serializing"; "convert" (claim 1, line 10) should be changed to "converting"; "to transmit" (claim 1, line 11) should be changed to "transmitting"; "is operative to test" (claim 4, line 2) should be changed to "tests"; "is operative, with respect to a given link to individually test" (claim 5, line 2) should be changed to

“, with respect to a given link, individually tests”; “is operative to find” (claim 6, line 2) should be changed to “finds”; “is operative to divide” (claim 7, lines 1-2) should be changed to “divides”; and “are operative to allow” (claim 9, lines 1-2) should be changed to “allow”.

8. Claims 2-10 depend upon claim 1 and are objected to for the same reasons discussed above regarding claim 1.

9. Appropriate correction is required.

Drawings

10. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “FIG. 3” has been used to designate both the table in sheet “3/4” and the figure in sheet “4/4”. Two different figures cannot be labeled as the same “FIG. 3”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,804,316 to Shectman in view of U.S. Patent No. 5,923,653 to Denton in view of U.S. Patent No. 4,967,405 to Upp et al. in view of U.S. Patent No. 6,359,859 to Brolin et al., further in view of U.S. Patent No. 5,907,566 to Benson et al.

Regarding claim 1, Shectman teaches an interface device for connecting SONET/SDH termination devices with payload processing devices, comprising: (a) a receive module (e.g., frame recover system 10, see FIG. 1 and col. 2, line 66 – col. 3, line 28) operative to receive incoming partially compliant SONET/SDH signal streams (e.g., see col. 9, line 35 – col. 11, line 16 regarding “SONET” streams; and see col. 2, lines 10-14 regarding the inclusion of “random sequences of bit streams” indicating partial compliance), to recover bit boundaries (e.g., see col. 5, line 38 – col. 6, line 49 regarding identifying the first bit of words), and to recover byte and frame alignment (e.g., see col. 5, line 38 – col. 6, line 49 and col. 10, lines 20-49 regarding eight-bit word boundaries with respect to A1s and A2s, and also byte alignment and frame demarcation/ demultiplexing). However, while Shectman also teaches that scrambling of an STS signal at a transmit module is well known in the art (e.g., see col. 1, line 18 – col. 2, line 7), and specifically teaches a descrambler 126 (e.g., see col. 10, lines 20-67) is utilized in the invention at a receive module to account for the scrambling of the SONET/SDH signals from a transmit

module, the teachings of Shectman are directed primarily towards the receive module and may not specifically disclose a particular transmit module for scrambling. Additionally, Shectman may not specifically disclose 8B/10B coding is utilized.

Denton, like Shectman, also teaches a SONET/SDH interface, and specifically teaches a particular transmit module for scrambling (e.g., scrambler 84, see FIG. 9). Further, Denton teaches that the transmit module (e.g., comprising scrambler 84) is operative to scramble STS-48 to an STS-12 (e.g., see col. 6, line 57 – col. 7, line 11). Additionally, the teachings of Denton provide improved section and line overhead termination for SONET (e.g., see col. 2, line 21 – col. 3, line 45), as well as provide a specific embodiment (e.g., scrambler 84, see col. 6, line 57 – col. 7, line 11) for achieving scrambling of an STS signal as required in Shectman. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the SONET/SDH teachings of Denton to the SONET/SDH interface of Shectman in order to provide improved section and line overhead termination for SONET/SDH as well as provide a specific embodiment for achieving scrambling of an STS signal as required in Shectman. However, Shectman in view of Denton may not specifically disclose the transmit module scrambles an STS-12 and STS-51 signal, in addition to the STS-48, to an STS-12.

Upp, like Shectman and Denton, also teaches a SONET/SDH interface, and specifically teaches scrambling a plurality of different STS-N signals (e.g., STS-24 and STS-12) to yield another STS-N signal (e.g., STS-3) (e.g., see col. 6, lines 28-40). Further, the teachings of Upp provide an improvement in SONET/SDH interfaces whereby a plurality of different rate STS signals can be accommodated on a common path for enhanced flexibility (e.g., see col. 1, line 1 – col. 5, line 4). Thus, at the time of the invention it would have been obvious to one of ordinary

skill in the art to apply the SONET/SDH interface teachings of Upp to the SONET/SDH interface of Shectman in view of Denton in order to accommodate a plurality of different rate STS signals on a common path for enhanced flexibility. Additionally, while Upp may not specifically disclose the different scrambled STS signals are specifically STS-12, STS-51 and STS-48 to yield an STS-12, but rather, discloses a particular embodiment with STS-24 and STS-12 to yield a scrambled STS-3, it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on Appellant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement the STS-24/STS-12/STS-3 scrambling teachings of Upp in a STS-51/STS-48/STS-12 configuration since it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. However, Shectman in view of Denton in view of Upp may not specifically disclose the SONET/SDH streams are converted into LVDS levels for transmission.

Brolin, like Shectman, Denton and Upp, also teaches improvements for SONET/SDH (e.g., see abstract). Further, Brolin teaches that serialized SONET/SDH streams are converted into low voltage differential signal (LVDS) levels for transmission (e.g., see col. 4, line 63 – col.

5, line 10 and col. 12, lines 49-60). Also, the teachings of Brolin provide a scalable SONET/SDH interface for accommodating a plurality of configurations (e.g., see col. 4, line 38 – col. 6, line 27), and also provide a specific method of transmission for the SONET/SDH streams of Shectman in view of Denton in view of Upp. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the SONET/SDH interface teachings of Brolin to the SONET/SDH interface of Shectman in view of Denton in view of Upp in order to provide a scalable SONET/SDH interface for accommodating a plurality of configurations and also provide a specific method of transmission for the SONET/SDH streams of Shectman in view of Denton in view of Upp. However, Shectman, Denton, Upp, and Brolin may not specifically disclose 8B/10B coding is utilized.

Benson, like the art of Shectman, Denton, Upp, and Brolin, teaches a communication method for computer data transfer (e.g., see Benson at col. 1, lines 6-14) using a coding technique with frame boundaries (e.g., see Benson at col. 4, lines 46-62). Additionally, Benson discloses that the 8B/10B coding technique is well known in the art for transmitting data (e.g., see col. 1, lines 48-58 regarding 8B/10B coding developed by IBM at least by 1983). Further, Benson teaches 8B/10B coding is used (e.g., see col. 7, line 47 – col. 9, line 10 regarding “8B/10B encoder 21”) to find byte boundaries (e.g., see col. 8, line 45 – col. 9, line 10 regarding including a comma word periodically in order to “acquire byte sync”) and 8B/10B control characters to find frame boundaries (e.g., see col. 8, lines 18-44 regarding “the absence of a control word in a control location 45 indicates the boundaries of the ATM data cell or frame”, and “a control location correspond[s] with the last location in a frame so that the absence of a control word and the inclusion of an error detection code 33 can signal the boundaries of a data

Art Unit: 2616

cell"). Still further, the 8B/10B coding teachings of Benson provide reduced costs by providing data transfer adapted for existing circuitry developed for other applications (e.g., see Benson at col. 2, lines 45-51). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement the data transfer of Shectman in view of Denton in view of Upp in view of Brolin with the 8B/10B coding from the data transfer teachings of Benson in order to provide reduced costs by providing data transfer adapted for existing circuitry developed for other applications (e.g., see Benson at col. 2, lines 45-51).

Regarding claims 2 and 3, Denton teaches scrambled encoding for STS-12 at 622.08 Mbps and STS-48 at 2488.32 Mbps (e.g., see col. 1, line 21 – col. 3, line 16). Also, as discussed above, the teachings of Denton provide improved section and line overhead termination for SONET (e.g., see col. 2, line 21 – col. 3, line 45), as well as provide a specific embodiment (e.g., scrambler 84, see col. 6, line 57 – col. 7, line 11) for achieving scrambling of an STS signal as required in Shectman. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the SONET/SDH teachings of Denton to the SONET/SDH interface of Shectman in order to provide improved section and line overhead termination for SONET/SDH as well as provide a specific embodiment for achieving scrambling of an STS signal as required in Shectman. Further, while additional bit rates for other STS-N signals may not be specifically disclosed by the above-cited prior art, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, Examiner took official notice that STS-51 has a rate of 2643.84Mbps and that 8B/10B encoding is well known in the art for encoding STS-12 to yield a rate of 777.6 Mbps. In Applicant's response to the previous office action, Applicant has not

Art Unit: 2616

traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement 8B/10B encoding to achieve a rate of 777.6 Mbps since such an implementation is well known in the art and it would have been obvious to one of ordinary skill in the art to implement STS-51 at a rate of 2643.84 Mbps since such an implementation is also well known in the art.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shectman in view of Denton in view of Upp in view of Brolin in view of Benson, further in view of U.S. Patent No. 5,774,242 to O'Sullivan et al.

Regarding claim 4, Shectman in view of Denton in view of Upp in view of Brolin in view of Benson teach the interface discussed above regarding claim 1, however, may not specifically disclose testing links by inserting and checking pseudo random bit sequences (PRBS). However, O'Sullivan, like the above-mentioned prior art, also teaches a method for optical transmission, and specifically, teaches testing links by inserting and checking PRBS (e.g., see col. 3, lines 18-28). Also, the teachings of O'Sullivan provide improved determination of the quality of transmission in more complex optical systems than permitted by other prior art (e.g., see col. 3, lines 29-40). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the optical communications teachings of O'Sullivan to the optical interface of Shectman in view of Denton in view of Upp in view of Brolin in view of Benson in

order to provide improved determination of the quality of transmission in more complex optical systems than permitted by other prior art.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shectman in view of Denton in view of Upp in view of Brolin in view of Benson, further in view of U.S. Patent No. 5,455,832 to Bowmaster.

Regarding claim 5, Shectman in view of Denton in view of Upp in view of Brolin in view of Benson teach the interface discussed above regarding claim 1, however, may not specifically disclose individually testing a synchronous payload envelope (SPE) of a largest concatenated STS-Nc carried by the link by inserting and checking PRBS. However, Bowmaster, like the above-mentioned prior art, also teaches a method for improving optical communications, and specifically, teachings testing an SPE of a largest concatenated STS-Nc carried by the link by inserting and checking PRBS (e.g., see col. 14, line 53 – col. 15, line 4 regarding generating a test signal and testing an SPE; see also col. 4, lines 45-57 and col. 6, lines 45-58 regarding concatenation and STS-Nc). Also, the teachings of Bowmaster provide improvements in optical communications by determining network elements conform to particular criteria or standards (e.g., see col. 13, lines 48-51). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the optical communication teachings of Bowmaster to the optical communication interface of Shectman in view of Denton in view of Upp in view of Brolin in view of Benson in order to provide improvements in optical communications by determining network elements conform to particular criteria or standards.

Art Unit: 2616

15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shectman in view of Denton in view of Upp in view of Brolin in view of Benson, further in view of U.S. Patent No. 6,778,778 to Richards et al.

Regarding claim 10, Shectman in view of Denton in view of Upp in view of Brolin in view of Benson teach the interface discussed above regarding claim 1, however, may not specifically disclose diagnostic line testing by inserting B1 errors at a transmit module and checking them at a receive module. However, Richards, like the above-mentioned prior art, teaches improvements for optical communications, and specifically, teaches diagnostic line testing by inserting B1 errors at a transmit module and checking them at a receive module (e.g., see col. 4, lines 33-65). Also, the teachings of Richards provide improved optical communications by enabling a user to test devices from a cross-country distance (e.g., see col. 3, lines 38-42). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the optical communications teachings of Richards to the optical communications interface of Shectman in view of Denton in view of Upp in view of Brolin in view of Benson in order to provide improved optical communications by enabling a user to test devices from a cross-country distance.

Allowable Subject Matter

16. Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action, rewritten to overcome the objections set forth in this Office action, and rewritten to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2616

17. The following is a statement of reasons for the indication of allowable subject matter:
claim 6 recites the receive module in the interface of claim 1 comprises multiple receivers and
the interface is operative to find mutual frame alignment of SONET/SDH frames on the
receivers, wherein such a particular limitation was not found in a search of related prior art.
Claims 7-9 depend upon claim 6 and, thus, comprise allowable subject matter for the same
reasons discussed above regarding claim 6.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this
Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
MONTHS of the mailing date of this final action and the advisory action is not mailed until after
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,
however, will the statutory period for reply expire later than SIX MONTHS from the date of this
final action.

19. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The
examiner can normally be reached on M-F, 9:00am-5:00pm.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Justin M. Philpott


CHI PHAM
EXAMINER
6/9/06